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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/299,539	04/26/1999	ANTONIO MUNOZ-ESCALONA LAFUENTE	B-3643-61707	3400

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LADAS & PARRY
5670 WILSHIRE BOULEVARD
SUITE 2100
LOS ANGELES, CA 900365679

EXAMINER
PASTERCZYK, JAMES W

ART UNIT	PAPER NUMBER
1755	21

DATE MAILED: 04/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

MF-21

Office Action Summary

Application No.	Applicant(s)
09/299,539	Lafuente et al.
Examiner	**Art Unit**
J. Pasterczyk	1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Jan 17, 2002*.

2a) ☐ This action is **FINAL.** 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-8, 10-18, and 20-22* is/are pending in the application.

4a) Of the above, claim(s) *8 and 20* is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-7, 10-18, 21, and 22* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☒ Claims *1-8, 10-18, and 20-22* are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☒ All b) ☐ Some* c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☐ Notice of References Cited (PTO-892)
16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
18) ☐ Interview Summary (PTO-413) Paper No(s). _____
19) ☐ Notice of Informal Patent Application (PTO-152)
20) ☐ Other:

1. This Office action is in response to the amendment filed with the CPA of 1/17/02 and refers to the final rejection in the parent case mailed 3/20/01.

2. The abstract of the disclosure is objected to because it is now far too broad and vague, lacking the apparent invention, i.e. the presence of siloxane groups on side groups of the metallocenes which react with the surface-bound alumoxane or surface-bound hydroxide groups to form a covalent bond between the metallocene and the support or alumoxane. Correction is required. See MPEP § 608.01(b).

3. Claims 1-7 and 10-18 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amendment of 1/23/01 changing the formulae for II and III does not appear to have any support in the specification as originally filed. The formulae given at p. 6 et seq. of the specification do not conform to these general formula, hence no support is found for these formulae at all.

4. Claims 1-7, 10-18 and 21-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 21, it appears necessary that the porous inorganic support material have surface hydroxyl groups which may react with the siloxane groups necessarily present in the metallocene compounds or the alkyl groups necessarily present on the alumoxanes so that a

covalent bond may be formed between the support and the catalyst or cocatalyst; lack of such amounts to an "invitation to experiment"; *In re Gardner, Roe and Willey*, 166 USPQ 138 (CCPA 1970). Otherwise, it is not clear how the metallocene or alumoxane remains bound to the surface of the support material, since surface bridging Si-O-Si units would not likely react with the siloxane groups of the metallocene or the alkyl groups of the alumoxane.

Further in claim 21, if m is only 1, then the text reciting this should be deleted as prolix and the variable also deleted from the formulae.

Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1-7, 10-18 and 21-22 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hidalgo Llinas as cited in and for the reasons of record given in paragraph 9 of the previous Office action.

7. Claims 1-7, 10-18 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Antberg in view of Welborn as cited in and for the reasons of record given in paragraph 10 of the previous Office action.

8. Applicant's arguments filed 1/23/01 have been fully considered but they are not persuasive.

Applicants first apparently believe that the rejection over Hidalgo Llinas is a straight obviousness rejection rather than an inherency rejection, which is what is made when a 102/103 rejection is invoked. Hence the appeal to a *Graham v. John Deere* type of analysis is unavailing, since the proper way to defeat an inherency rejection is by a showing under rule 132 that the product claimed is in fact different from that disclosed in the prior art under *In re Best*, 195 USPQ 430, 433 (CCPA 1977). Since Hidalgo Llinas also contains metallocenes having groups which would react analogously to the $-R^{I}OSiR^{II}_3$ group, it would logically react in the same manner with the residual surface hydroxyl groups of the porous inorganic support as the product-by-process claims of the present invention.

Regarding the argument against the 103 rejection made using Antberg in view of Welborn, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). However, here the reasoning for combining the references was found directly from the references themselves rather than via any sort of hindsight. In addition, Antberg also contains metallocenes which would react analogously to the $-R^{I}OSiR^{II}_3$ group, thus they would

logically react in the same manner with the residual surface hydroxyl groups of the porous inorganic support as the product-by-process claims of the present invention.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Pasterczyk whose telephone number is (703) 308-3497. The examiner can normally be reached on M-F from 9 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached on (703) 308-3823. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 for normal faxes, 872-9311 for after final faxes.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Mark L. Bell
Supervisory Patent Examiner
Technology Center 1700

J. Pasterczyk

3/29/02